

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY CLASS II SYNTHETIC MINOR PERMIT

COMPANY: The Fairfax Companies, LLC **FACILITY:** Speedway/El Mirage Landfills

PERMIT #: 45622 DATE ISSUED: Draft

EXPIRY DATE:

SUMMARY

This Class II synthetic renewal permit is issued to The Fairfax Companies, LLC, the Permittee, for operation of its grinding/screening plant which is operated at the Speedway Construction Debris Landfill in Tucson, Arizona and at El Mirage Landfill in El Mirage, Arizona. This permit renews and supersedes Operating Permit #1001434.

The grinding/screening plant consists of three generators and three grinders. The generators have a combined capacity of 2630 brake horsepower which is greater than the 325 brake horsepower permit applicability requirement stated in A.A.C. R18-2-302.B.2.iv. Therefore, the facility in accordance with the aforementioned condition is required to obtain an air quality permit. The NOx emissions of the internal combustion engines is greater than 100 tons per year so the facility is accepting voluntary restrictions to limit emissions below major source thresholds.

This permit is issued in accordance with Title 49, Chapter 3 of the Arizona Revised Statutes. All definitions, terms and conditions used in this permit conform to those in the Arizona Administrative Code R18-2-101 et. seq. (A.A.C.), except as otherwise defined in this permit.

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ATTACHMENT "A": GENERAL PROVISIONS

Air Quality Control Permit No. 45622 For The Fairfax Companies, LLC

I. PERMIT EXPIRATION AND RENEWAL

[ARS § 49-426.F, A.A.C. R18-2-304.C.2, and -306.A.1]

- **A.** This permit is valid for a period of five years from the date of issuance.
- **B.** The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months, prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS

[A.A.C. R18-2-306.A.8.a and b]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona air quality statutes and air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- **B.** It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

[A.A.C. R18-2-306.A.8.c, -321.A.1.c-d, and -321.A.2]

- **A.** The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- **B.** The permit shall be reopened and revised under any of the following circumstances
 - 1. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - 2. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
- C. Proceedings to reopen and reissue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings shall not result in a resetting of the five-year permit term.

IV. POSTING OF PERMIT

[A.A.C. R18-2-315]

- **A.** The Permittee shall post this permit or a certificate of permit issuance where the facility is located in such a manner as to be clearly visible and accessible. All equipment covered by this permit shall be clearly marked with one of the following:
 - 1. Current permit number; or
 - 2. Serial number or other equipment ID number that is also listed in the permit to identify that piece of equipment.
- **B.** A copy of the complete permit shall be kept on site.

V. FEE PAYMENT

[A.A.C. R18-2-306.A.9 and -326]

The Permittee shall pay fees to the Director pursuant to ARS § 49-426(E) and A.A.C. R18-2-326.

VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE

[A.A.C. R18-2-327.A and B]

- A. The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31st or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
- **B.** The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

VII. COMPLIANCE CERTIFICATION

[A.A.C. R18-2-309.2.a, -309.2.c-d, and -309.5.d]

A. The Permittee shall submit a compliance certification to the Director semiannually which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15th, and shall report the compliance status of the source during the period between October 1st of the previous year and March 31st of the current year. The second certification shall be submitted no later than November 15th, and shall report the compliance status of the source during the period between April 1st and September 30th of the current year.

The compliance certifications shall include the following:

- 1. Identification of each term or condition of the permit that is the basis of the certification;
- The Identification of the methods or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
- 3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in Condition VII.A.2 above. The certifications shall identify each deviation and take it into account for consideration in the compliance certification;

- 4. All instances of deviations from permit requirements reported pursuant to Condition XII.B of this Attachment; and
- 5. Other facts the Director may require determining the compliance status of the source.
- **B.** A progress report on all outstanding compliance schedules shall be submitted every six months beginning with six months after permit issuance.

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

[A.A.C. R18-2-304.H]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY

[A.A.C. R18-2-309.4]

Upon presentation of proper credentials, the Permittee shall allow the Director or the authorized representative of the Director to:

- **A.** Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- **B.** Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- **D.** Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- **E.** Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

[A.A.C. R18-2-304.C]

If this source becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

XI. ACCIDENTAL RELEASE PROGRAM

[40 CFR Part 68]

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the time line specified in 40 CFR Part 68.

XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

- 1. Excess emissions shall be reported as follows:
 - a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
 - i. Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XII.A.1.b below.
 - ii. Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XII.A.1.a.(1) above.
 - b. The report shall contain the following information:
 - i. Identity of each stack or other emission point where the excess emissions occurred;
 - ii. Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
 - iii. Date, time and duration, or expected duration, of the excess emissions;
 - iv. Identity of the equipment from which the excess emissions emanated;
 - v. Nature and cause of such emissions;
 - vi. If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions; and
 - vii. Steps taken to limit the excess emissions. If the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.
- 2. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XII.A.1 above.

[A.A.C. R18-2-310.01.C]

B. Permit Deviations Reporting

[A.A.C. R18-2-306.A.5.b]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to an emergency or within

two working days of the time when the owner or operator first learned of the occurrence of a deviation from a permit requirement.

C. Emergency Provision

[A.A.C. R18-2-306.E]

- 1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if Condition XII.C.3 is met.
- 3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was being properly operated at the time;
 - c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
- 4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

D. Compliance Schedule

[ARS § 49-426.I.5]

For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

E. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown

[A.A.C. R18-2-310]

1. Applicability

This rule establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

- a. Promulgated pursuant to Sections 111 or 112 of the Act;
- b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;
- c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA:
- d. Contained in A.A.C. R18-2-715.F; or
- e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5.

2. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. When emissions in excess of an applicable emission limitation are due to a malfunction, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

- a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the Permittee;
- b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the Permittee satisfactorily demonstrated that the measures were impracticable;
- d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions:
- e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

- g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;
- h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
- i. All emissions monitoring systems were kept in operation if at all practicable; and
- j. The Permittee's actions in response to the excess emissions were documented by contemporaneous records

3. Affirmative Defense for Startup and Shutdown

- a. Except as provided in Condition XII.E.3.b below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:
 - i. The excess emissions could not have been prevented through careful and prudent planning and design;
 - ii. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
 - iii. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - iv. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
 - v. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - vi. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;
 - vii. All emissions monitoring systems were kept in operation if at all practicable; and
 - viii. Contemporaneous records documented the Permittee's actions in response to the excess emissions.

- b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Condition XII.E.2 above.
- 4. Affirmative Defense for Malfunctions During Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to Condition XII.E.2 above.

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XII.E.2 or XII.E.3 above, the Permittee shall demonstrate, through submission of the data and information required by Condition XII.E and A.A.C. R18-2-310.01, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

XIII. RECORD KEEPING REQUIREMENTS

[A.A.C. R18-2-306.A.4]

- **A.** The Permittee shall keep records of all required monitoring information including, but not limited to, the following:
 - 1. The date, place as defined in the permit, and time of sampling or measurements;
 - 2. The date(s) analyses were performed;
 - 3. The name of the company or entity that performed the analyses;
 - 4. A description of the analytical techniques or methods used;
 - 5. The results of such analyses; and
 - 6. The operating conditions as existing at the time of sampling or measurement.
- **B.** The Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
- **C.** All required records shall be maintained either in an unchangeable electronic format or in a handwritten logbook utilizing indelible ink.

XIV. REPORTING REQUIREMENTS

[A.A.C. R18-2-306.A.5.a]

The Permittee shall submit the following reports:

- **A.** Compliance certifications in accordance with Section VII of Attachment "A".
- **B.** Excess emission; permit deviation, and emergency reports in accordance with Section XII of Attachment "A".

C. Other reports required by any condition of Attachment "B".

XV. DUTY TO PROVIDE INFORMATION

[A.A.C. R18-2-304.G and -306.A.8.e]

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- **B.** If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XVI. PERMIT AMENDMENT OR REVISION

[A.A.C. R18-2-317.01, -318, -319, and -320]

The Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVII, as follows:

- **A.** Facility Changes that Require a Permit Revision Class II (A.A.C. R18-2-317.01);
- **B.** Administrative Permit Amendment (A.A.C. R18-2-318);
- C. Minor Permit Revision (A.A.C. R18-2-319); and
- **D.** Significant Permit Revision (A.A.C. R18-2-320)

The applicability and requirements for such action are defined in the above referenced regulations.

XVII. FACILITY CHANGE WITHOUT A PERMIT REVISION

[A.A.C. R18-2-306.A.4 and -317.02]

- A. Except for a physical change or change in the method of operation at a Class II source requiring a permit revision under A.A.C. R18-2-317.01, or a change subject to logging or notice requirements in Conditions XVII.B and XVII.C below, a change at a Class II source shall not be subject to revision, notice, or logging requirements under this Section.
- **B.** Except as otherwise provided in the conditions applicable to an emissions cap created under A.A.C. R18-2-306.02, the following changes may be made if the source keeps on site records of the changes according to Appendix 3 of the Arizona Administrative Code:
 - 1. Implementing an alternative operating scenario, including raw materials changes;
 - 2. Changing process equipment, operating procedures, or making any other physical change if the permit requires the change to be logged;
 - 3. Engaging in any new insignificant activity listed in A.A.C. R18-2-101.57.a through A.A.C. R18-2-101.57.i but not listed in the permit;

- 4. Replacing an item of air pollution control equipment listed in the permit with an identical (same model, different serial number) item. The Director may require verification of efficiency of the new equipment by performance tests; and
- 5. A change that results in a decrease in actual emissions if the source wants to claim credit for the decrease in determining whether the source has a net emissions increase for any purpose. The logged information shall include a description of the change that will produce the decrease in actual emissions. A decrease that has not been logged is creditable only if the decrease is quantifiable, enforceable, and otherwise qualifies as a creditable decrease.
- C. Except as provided in the conditions applicable to an emissions cap created under A.A.C. R18-2-306.02, the following changes may be made if the source provides written notice to the Department in advance of the change as provided below:
 - 1. Replacing an item of air pollution control equipment listed in the permit with one that is not identical but that is substantially similar and has the same or better pollutant removal efficiency: 7 days. The Director may require verification of efficiency of the new equipment by performance tests;
 - 2. A physical change or change in the method of operation that increases actual emissions more than 10% of the major source threshold for any conventional pollutant but does not require a permit revision: 7 days;
 - 3. Replacing an item of air pollution control equipment listed in the permit with one that is not substantially similar but that has the same or better efficiency: 30 days. The Director may require verification of efficiency of the new equipment by performance tests;
 - 4. A change that would trigger an applicable requirement that already exists in the permit: 30 days unless otherwise required by the applicable requirement;
 - 5. A change that amounts to reconstruction of the source or an affected facility: 7 days. For the purposes of this subsection, reconstruction of a source or an affected facility shall be presumed if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new source or affected facility and the changes to the components have occurred over the 12 consecutive months beginning with commencement of construction; and
 - 6. A change that will result in the emissions of a new regulated air pollutant above an applicable regulatory threshold but that does not trigger a new applicable requirement for that source category: 30 days. For purposes of this requirement, an applicable regulatory threshold for a conventional air pollutant shall be 10% of the applicable major source threshold for that pollutant.
- **D.** For each change under Condition XVII.C above, the written notice shall be by certified mail or hand delivery and shall be received by the Director the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice shall include:
 - 1. When the proposed change will occur;

- 2. A description of the change;
- 3. Any change in emissions of regulated air pollutants; and
- 4. Any permit term or condition that is no longer applicable as a result of the change.
- **E.** A source may implement any change in Condition XVII.C above without the required notice by applying for a minor permit revision under A.A.C. R18-2-319 and complying with subsection A.A.C. R18-2-319.D.2 and A.A.C. R18-2-319.G.
- **F.** The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section, other than implementation of an alternate operating scenario under Condition XVII.B.1.
- G. Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under this Section over the term of the permit, constitutes a change under subsection A.A.C. R18-2-317.01.A.
- **H.** If a source change is described under both Conditions XVII.B and XVII.C above, the source shall comply with Condition XVII.C above. If a source change is described under both Condition XVII.C above and A.A.C. R18-2-317.01.B, the source shall comply with A.A.C. R18-2-317.01.B.
- I. A copy of all logs required under Condition XVII.B shall be filed with the Director within 30 days after each anniversary of the permit issuance date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.
- **J.** Logging Requirements

[A.A.C. R18-2-306.A.4]

- 1. Each log entry required by a change under Condition XVII.B shall include at least the following information:
 - a. A description of the change, including:
 - i. A description of any process change;
 - ii. A description of any equipment change, including both old and new equipment descriptions, model numbers, and serial numbers, or any other unique equipment ID number; and
 - iii. A description of any process material change.
 - b. The date and time that the change occurred.
 - c. The provision of A.A.C. R18-2-317.02.B that authorizes the change to be made with logging.
 - d. The date the entry was made and the first and last name of the person making the entry.
- 2. Logs shall be kept for 5 years from the date created. Logging shall be performed in indelible ink in a bound log book with sequentially number pages, or in any other form, including electronic format, approved by the Director.

- **A.** The Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.
- **B.** Operational Conditions During Testing

Tests shall be conducted during operation at the maximum possible capacity of each unit under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

- C. Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.
- **D.** Test Plan

At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan to the Director in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

- 1. Test duration:
- 2. Test location(s);
- 3. Test method(s); and
- 4. Source operation and other parameters that may affect test results.
- E. Stack Sampling Facilities

The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

- 1. Sampling ports adequate for test methods applicable to the facility;
- 2. Safe sampling platform(s);
- 3. Safe access to sampling platform(s); and
- 4. Utilities for sampling and testing equipment.
- **F.** Interpretation of Final Results

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological

conditions, or other circumstances beyond the Permittee's control, compliance may, upon the Director's approval, be determined using the arithmetic mean of the results of the other two runs. If the Director or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

G. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

XIX. PROPERTY RIGHTS

[A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XX. SEVERABILITY CLAUSE

[A.A.C. R18-2-306.A.7]

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

XXI. PERMIT SHIELD

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements identified in the portions of this permit subtitled "Permit Shield". The permit shield shall not apply to any minor revisions pursuant to Condition XVI.C of this Attachment and any facility changes without a permit revision pursuant to Section XVII of this Attachment.

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ATTACHMENT "B": SPECIFIC CONDITIONS

Air Quality Control Permit No. 45622 For The Fairfax Companies, LLC

I. FACILITY WIDE LIMITATIONS

A. Operating Limitations

1. The Permittee shall operate and maintain all equipment at the facility in accordance with manufacturer's specifications.

[A.A.C. R18-2-306.A.2]

2. The Permittee shall operate all the facility equipment accordance with vendor-supplied operations and maintenance instructions. If vendor-supplied operations and maintenance instructions are not available, the Permittee shall prepare an Operation and Maintenance Plan, which provides adequate information to properly operate and maintain the equipment in good working order. In the absence of vendor-supplied operations and maintenance instructions, the Permittee shall operate the equipment in accordance with the Operation and Maintenance Plan (OMP). The Operation and Maintenance Plan shall be made available to ADEQ on request.

[A.A.C. R18-2-306.A.2]

3. The Permittee shall have on-site or on-call a person that is certified in EPA Reference Method 9 for the observation and evaluation of visible emissions.

[A.A.C. R18-2-306.A.2]

4. The Permittee shall not process asbestos containing material in the chipper/grinder.

[A.A.C. R18-2-306.01 and -331.A.3.a]

[Material Permit Condition is indicated by underline and italics]

B. Record Keeping Requirements

1. The Permittee shall maintain on-site, records of the manufacturer's specifications for all equipment utilized at the facility.

[A.A.C. R18-2-306.A.4]

2. All records, analyses, and reports shall be retained for a minimum of five years from the date of generation. The most recent two years of data shall be kept on-site.

[A.A.C. R18-2-306.A.4]

C. Reporting Requirements

The Permittee shall submit reports of all monitoring activities required in Attachment "B" along with the compliance certifications required by Section VII of Attachment "A".

[A.A.C. R18-2-306.A.5]

II. CHIPPER/GRINDER REQUIREMENTS

A. Applicability

This Section is applicable to the chippers/grinders identified in Attachment "C".

B. Particulate Matter

- 1. Emission Limitations/Standards
 - a. For particulate matter discharged into the atmosphere in any one hour from any unclassified process source in total quantities in excess of the amounts calculated by the following equation:

[A.A.C. R18-2-730.A.1]

For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

 $E = 4.10P^{0.67}$

Where:

- E = the maximum allowable particulate emissions rate in pounds-mass per hour.
- P = the process weight rate in tons-mass per hour.
- b. The total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C. R18-2-730.B]

- 2. Monitoring, Recordkeeping and Reporting
 - a. The Permittee shall not cause or allow to be discharged into the atmosphere any plume which exhibits opacity greater than 20 percent.

[A.A.C. R18-2-702.B.3]

b. A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from the wastewater treatment plant. If the opacity of the emissions observed appears to exceed the standard, the observer shall conduct a certified EPA Reference Method 9 Observation. The Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, location of observer, name of observer, date and time of observation, and the results of the observation.

[A.A.C. R18-2-306.A.3.c]

c. If the observation shows a Method 9 opacity reading in excess of 20 percent, the Permittee shall initiate appropriate corrective action to reduce the opacity below

20 percent. The Permittee shall keep a record of the corrective action performed.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-702.B.3, A.A.C. R18-2-730.A.1, and A.A.C. R18-2-730.B.

[A.A.C. R18-2-325]

III. INTERNAL COMBUSTION ENGINES

A. Applicability

The Section is applicable to the internal combustion engines identified in Attachment "C".

B. Operating Limitations

1. The Permittee shall not operate the internal combustion engines for more than 2,920 hours per year per internal combustion engine, on a rolling twelve month total.

[A.A.C. R18-2-306.01.A and 331.A.3.a]

[Material permit conditions are indicated by underline and italics]

2. While operating in Maricopa County, the Permittee shall not operate the generators for more than 2 hours per day.

[A.A.C. R18-2-306.01.A and A.A.C. R18-2-331.A.3.a] [Material Permit Condition is indicated by underline and italics]

3. While operating in Maricopa County, the Permittee shall not operate the generators for more than 713 hours in any rolling 12-month period.

[A.A.C. R18-2-306.01.A and A.A.C. R18-2-331.A.3.a] [Material Permit Condition is indicated by underline and italics]

4. Monitoring and Recordkeeping

The Permittee shall keep records of monthly totals of the hours of operation of each internal combustion engine. At the end of each month, the Permittee shall calculate and record a rolling 12-month total of the hours of operation.

[A.A.C. R18-2-306.A.3.c]

C. Fuel Limitations

1. The Permittee shall only fire low sulfur diesel fuel (less than 0.9 percent by weight of sulfur) fuel in the internal combustion engines.

[A.A.C. R18-2-719.H]

2. The Permittee shall keep daily records of the sulfur content of the fuel being fired in the machine. The Permittee shall keep records of fuel supplier certifications to demonstrate compliance with the sulfur content limit specified in Condition III.C.1. The certification shall contain the sulfur content of the fuel and the method used to determine the sulfur content of the fuel. These records shall be made available to ADEQ upon request.

[A.A.C. R18-2-306.A.3.c and -719.I]

3. Permit Shield

Compliance with this Part shall be deemed compliance with A.A.C. R18 2-719.H and A.A.C. R18 2-719.I.

[A.A.C. R18-2-325]

D. **Particulate Matter and Opacity**

- 1. **Emissions Limitations and Standards**
 - The Permittee shall not cause, allow or permit the emission of particulate matter, a. caused by combustion of fuel, from any stationary rotating machinery into the atmosphere in excess of the amounts calculated by the following equation:

 $E = 1.02 Q^{0.769}$

Where

- E =the maximum allowable particulate emission rate in pounds-mass per hour
- $\mathbf{O} =$ the heat input in million Btu per hour

[A.A.C. R18-2-719.C.1]

- For purposes of this Section, the heat input shall be the aggregate heat content of b. all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all operating fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted. [A.A.C. R18-2-719.B]
- Opacity c.
 - The Permittee shall not cause, allow or permit to be emitted into the i. atmosphere from any stationary rotating machinery, smoke for any period greater than 10 consecutive seconds which exceeds 40% opacity. [A.A.C. R18-2-719.E]
 - Visible emissions when starting cold equipment shall be exempt from ii. this requirement for the first 10 minutes.

[A.A.C. R18-2-719.E]

- 2. Monitoring, Reporting, and Recordkeeping
 - The Permittee shall keep records of fuel supplier certifications. The certification a. shall contain information regarding the name of fuel supplier and lower heating value of the fuel. These records shall be made available to ADEO upon request.

[A.A.C. R18-2-306.A.3.c and -719.I]

b. A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from the stack of the IC engines if in operation. If the opacity of the emissions observed appears to exceed the standard, the observer shall conduct a certified EPA Reference Method 9 observation. The

Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, name of observer, date and time of observation, and the results of the observation.

[A.A.C. R18-2-306.A.3.c]

c. If the observation results in a Method 9 opacity reading in excess of 40%, the Permittee shall report this to ADEQ as excess emission and initiate appropriate corrective action to reduce the opacity below 40%. The Permittee shall keep a record of the corrective action performed.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-719.C.1, A.A.C. R18-2-719.E, and A.A.C. R18-2-719.I.

[A.A.C. R18-2-325]

E. Sulfur Dioxide

1. Emission Limitations and Standards

The Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu. [A.A.C. R18-2-719.F]

2. Monitoring, Recordkeeping, and Reporting

The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8%.

[A.A.C. R18-2-719.J]

3. Permit Shield

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-719.F and A.A.C. R18-2-719.J

IV. FUGITIVE DUST SOURCES

This Section applies to open areas, dry washes, riverbeds, roadways, streets, material handling operations, and storage piles.

Particulate Matter and Opacity

A. Emission Limitations/Standards

1. Opacity of emissions from any fugitive dust non-point source shall not be greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9.

[A.A.C. R18-2-614]

2. The Permittee shall not cause, allow or permit visible emissions from any fugitive dust point source, in excess of 20 percent opacity.

[A.A.C-R18-2-702.B]

- 3. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:
 - a. Keep dust and other types of air contaminants to a minimum in an open area where construction operations, repair operations, demolition activities, clearing operations, leveling operations, or any earth moving or excavating activities are taking place, by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means;

[A.A.C. R18-2-604.A]

- b. Keep dust to a minimum from driveways, parking areas, and vacant lots where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means;

 [A.A.C. R18-2-604.B]
- Keep dust and other particulate to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by other reasonable means when a roadway is repaired, constructed, or reconstructed;

[A.A.C. R18-2-605.A]

- d. Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust;

 [A.A.C. R18-2-605.B]
- e. Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods when crushing, handling, or conveying material likely to give rise to airborne dust;

[A.A.C. R18-2-606]

f. Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored;

[A.A.C. R18-2-607.A]

- g. Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents;

 [A.A.C. R18-2-607.B]
- h. Any other method as proposed by the Permittee and approved by the Director. [A.A.C. R18-2-306.A.3.c]

B. Air Pollution Control Requirements

Haul Roads and Storage Piles

Water, or an equivalent control, shall be used to control visible emissions from haul roads and storage piles.

[A.A.C. R-18-2-306.A.2 and -331.A.3.d]

[Material Permit Condition is indicated by underline and italics]

C. Monitoring and Recordkeeping Requirements

1. The Permittee shall maintain records of the dates on which any of the activities in Section

[A.A.C. R18-2-306.A.3.c]

2. Opacity Monitoring Requirements

a. A certified Method 9 observer shall conduct a monthly visual survey of visible emissions from the fugitive dust sources. Permittee shall keep record of the name of the observer, the location and date on which the observation was made, and the results of the observation.

[A.A.C. R18-2-306.A.3.c]

b. If the observer sees a plume from a fugitive dust source that on an instantaneous basis appears to exceed applicable opacity standard, then the observer shall if practicable, take a six-minute Method 9 observation of the visible emission.

[A.A.C. R18-2-306.A.3.c]

- i. If the six-minute opacity of the visible emission is less than or equal to applicable opacity standard, the observer shall make a record of the following:
 - (a) Location, date, and time of the observation; and
 - (b) The results of the Method 9 observation.
- ii. If the six minute opacity of the visible emission exceeds applicable opacity standard, then the Permittee shall do the following:
 - (a) Adjust or repair the controls or equipment to reduce opacity to below the applicable stand; and
 - (b). Report it as an excess emission under Section XII.A of Attachment "A".

[A.A.C. R18-2-306.A.3.c]

D. Permit Shield

Compliance with Section IV shall be deemed compliance with the following applicable requirements as of the issuance date of this permit: A.A.C. R18-2-604.A, A.A.C. R18-2-604.B, A.A.C. R18-2-605.A, R18-2-605.B, A.A.C. R18-2-606, A.A.C. R18-2-607.A, A.A.C. R18-2-607.B, A.A.C. R18-2-614, and A.A.C. R18-2-702.B.

[A.A.C. R18-2-325]

V. CONDITIONS SPECIFIC TO PORTABLE SOURCES

A. Equipment Identification

[A.A.C. R18-2-315.A.2 and -324.E]

The equipment serial number, utilizing not less than four-inch high characters, shall be stenciled on each permitted piece of equipment, and referenced in all correspondence with the Department.

B. Move Notice

[A.A.C. R18-2-324.D and A.A.C. R18-2-306.A.5]

A portable source may be transferred from one location to another provided that the Permittee of such equipment notifies the Director, and any control officer who has jurisdiction over the geographic area that includes the new location, of the transfer of the transfer by certified mail at least ten (10) working days before the transfer. The location change shall include the following:

- 1. A description of **all** permitted equipment (under the same owner or operator) which is going to be present at the site including the permit number, the manufacturer, the model number, the serial number, and equipment ID number(s) for such equipment;
- 2. The address and description of the present location of the equipment;
- 3. The address and description of the location to which the equipment is to be transferred, including the availability of all utilities, such as water and electricity, necessary for the proper operation of all control equipment;
- 4. The date on which equipment is to be moved; and
- 5. The date on which operation of the equipment will begin at the new location.

C. Renting or Leasing Permitted Equipment

[A.A.C. R18-2-324.C]

In the case that equipment covered under this permit is rented or leased, this permit shall be provided by the owner to the renter or lessee, and the renter or lessee shall be bound by this permit's provisions. In the event a copy of the permit is not provided to the renter or lessee, both the owner and the renter or lessee shall be responsible for the operation of this equipment in compliance with the permit conditions and any violations thereof.

D. Portable Sources Operating Solely in One County

[A.A.C. R18-2-324.A and -324.B]

A portable source that will operate for the duration of its permit solely in one county that has established a local air pollution control program pursuant to A.R.S. 49-479 shall obtain a permit from that county. A portable source with a county permit shall not operate in any other county until it receives a permit from the Arizona Department of Environmental Quality.

[A.A.C. R18-2-325]

VI. OTHER PERIODIC ACTIVITY REQUIREMENTS

A. Abrasive Blasting

Particulate Matter and Opacity

- 1. Emission Limitations/Standards
 - a. The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:
 - i. wet blasting;
 - ii. effective enclosures with necessary dust collecting equipment; or

iii. any other method approved by the Director.

[A.A.C. R18-2-726]

b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B]

2. Monitoring and Recordkeeping Requirement

Each time an abrasive blasting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:

- a. The date the project was conducted;
- b. The duration of the project; and
- c. Type of control measures employed.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

[A.A.C.R18-2-325]

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-726 and A.A.C. R18-2-702.B.1.

B. Use of Paints

- 1. Volatile Organic Compounds
 - a. Emission Limitations/Standards

While performing spray painting operations, the Permittee shall comply with the following requirements:

i. The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.

[A.A.C.R18-2-727.A]

- ii. The Permittee or their designated contractor shall not either:
 - (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
 - (b) Thin or dilute any architectural coating with a photochemically reactive solvent.

[A.A.C.R18-2-727.B]

iii. For the purposes of Conditions VI.B.1.a.ii and VI.B.1.a.v, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Conditions VI.B.1.a.iii(a) through VI.B.1.a.iii(c) below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

[A.A.C.R18-2-727.C]

- (a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.
- (b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.
- (c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.
- iv. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Conditions VI.B.1.a.iii(a) through VI.B.1.a.iii(c) above, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

[A.A.C.R18-2-727.D]

v. The Permittee shall not dispose of by evaporation more than 1.5 gallons of photochemically reactive solvent in any one day.

[SIP Provision R9-3-527.C]

- b. Monitoring and Recordkeeping Requirements
 - i. Each time a spray painting project is conducted, the Permittee shall log in ink, or in an electronic format, a record of the following:
 - (a) The date the project was conducted;
 - (b) The duration of the project;
 - (c) Type of control measures employed;
 - (d) Material Safety Data Sheets for all paints and solvents used in the project; and
 - (e) The amount of paint consumed during the project.
 - ii. Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition VI.B.1.b.i above.

[A.A.C. R18-2-306.A.3.c]

c. Permit Shield

[A.A.C. R18-2-325]

Compliance with this Part shall be deemed compliance with A.A.C.R18-2-727 and SIP Provision R9-3-527.C.

2. Opacity

a. Emission Limitation/Standard

The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20% opacity as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B]

b. Permit Shield

[A.A.C. R18-2-325]

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-702.B.

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos).

[A.A.C. R18-2-1101.A.8]

2. Monitoring and Recordkeeping Requirement

The Permittee shall keep all required records in a file. The required records shall include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-1101.A.8. [A.A.C. R18-2-325]

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ATTACHMENT "C": EQUIPMENT LIST

Air Quality Control Permit No. 45622 For The Fairfax Company

EQUIPMENT TYPE	MAX. CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.
Chipper/Grinder	10 tons/hr	Morbank	5600	NA/1691042	2004
Generator	880 hp	Caterpillar	3412E	3412E	2004
Chipper/Grinder	20 tons/hr	CBI	4800HZ	4860HZ3A0360	1999
Generator	750 hp	Caterpillar	3412	3412	1999
Chipper/Grinder	20 tons/hr	Morbank	6600/2004	186-1036	2004
Generator	1000 hp	Caterpillar	3412ETTA/ 2004	BDT03492	2004

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ATTACHMENT "D": ADDITIONAL CONDITIONS FOR OPERATIONS INSIDE MARICOPA COUNTY

Air Quality Control Permit No. 45622 For The Fairfax Companies, LLC

I. APPLICABILITY [A.R.S. § 49-402(D)]

While operating in Maricopa County the Permittee shall comply with the Conditions set forth in Attachment "B" and Attachment "C". Whenever more than one Condition in this Attachment regulating the same emissions applies to any emissions unit, or whenever a Condition in this Attachment and a Condition in Attachment "B" regulating the same emissions applies to any emissions unit, the Condition or combination of Conditions resulting in the lowest emissions rate or lowest concentration of regulated air pollutants released to the atmosphere shall apply, unless otherwise specifically exempted or designated in the applicable permit Conditions.

II. FACILITY WIDE REQUIREMENTS

A. Opacity

1. Emission Limitations and Standards

The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20% opacity.

[Maricopa County Rule 300 §301][State and Locally enforceable only]

2. Permit Shield

[A.A.C. R18-2-325]

Compliance with Conditions of this Part shall be deemed compliance with Maricopa County Rule 300 §301.

B. Particulate Matter

1. The Permittee shall not discharge or cause or allow the discharge of particulate matter emissions into the ambient air from any affected operation in excess of the allowable hourly emission rate determined by the following equations:

[Maricopa County Rule 311 § 301]

2. Determination of the allowable hourly emission rates (E) for process weight rates up to 60,000 lbs/hr shall be accomplished by use of the equation:

 $E = 3.59 P^{0.62}$ (P = less than or equal to 30 tons/hr)

Where:

E = Emissions in pounds per hour, and

P = Process weight rate in tons per hour.

[Maricopa County Rule 311 § 301.1]

3. Permit Shield [A.A.C. R18-2-325]

Compliance with Conditions of this Part shall be deemed compliance with Maricopa County Rule 311 §301 and Maricopa County Rule 311 §301.1.

C. Gaseous and Odorous Emissions

[Maricopa County Rule 320 §300]

1. The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under their control in such quantities or concentrations as to cause air pollution.

2. Permit Shield

[A.A.C. R18-2-325]

Compliance with Conditions of this Part shall be deemed compliance with Maricopa County Rule 320 §300.

D. Air Pollution Control Requirements

1. Material Containment Required

Materials including, but not limited to solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be other wise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[Maricopa County Rule 320 §302]

2. Stack Requirements

Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

[Maricopa County Rule 320 §303]

3. Monitoring, Record keeping and Reporting Requirements

Opacity Requirements

The Permittee shall conduct a weekly facility walk-through and observe visible emissions from all equipment capable of emitting visible emissions. The Permittee shall log the visual observations, including the date and time when the reading was taken, results of the readings, name of the person who took the readings and any other related information.

[Maricopa County Rule 220 §302.5] [State and Locally enforceable only]

4. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with, Maricopa County Rule 100 §200.63(a)(3)(c), Maricopa County Rule 220 §302.5,

III. INTERNAL COMBUSTION ENGINES

A. Applicability

The provisions of this rule apply to any single existing or new stationary spark or compression-ignited reciprocating IC engine including stationary IC engines used in cogeneration, with a rating of greater than 250 brake horsepower (bhp). The provisions of this rule also apply to a combination of IC engines each with a rated brake horsepower greater than 50 bhp used at a single source, whose maximum aggregate rated brake horsepower is greater than 250 bhp.

[Maricopa County Rule 324 §102]

B. Limitations for New and Existing Stationary IC Engines

An owner or operator of any engine that meets the criteria listed in Section III.A of this Attachment shall comply with either of the following:

[Maricopa County Rule 324 §301]

- 1. Use any fuel that contains no more than 0.05% sulfur by weight, alone or in combination with other fuels.
- 2. Use any waste derived fuel gas that contains no more than 0.08% sulfur by weight, alone or in combination with other fuels.

C. Good Combustion Practices / Tuning Procedure

[Maricopa County Rule 324 §302]

The Permittee shall conduct preventative maintenance or tuning procedures recommended by the engine manufacturer to ensure good combustion practices to minimize NOx emissions. A handheld monitor may be used if so desired by the owner or operator for measurement of NOx, CO, and concentrations in the effluent stream after each adjustment is made. This may assist in determining that the proper adjustment has been made to ensure NOx and CO minimization. In lieu of a manufacturer's procedure, a different procedure specified by any other maintenance guideline may be used as a default procedure. The tuning procedure shall include all of the following, if so equipped, and appropriate to the type of engine:

- 1. Lubricating Oil and Filter: change once every three months or after no more than 300 hours of operation, whichever occurs last.
- 2. Inlet Air Filter: clean once every three months or after no more than 300 hours of operation and replace every 1,000 hours of operation or every year, whichever occurs last;
- 3. Fuel Filter: clean once every year or replace (if cartridge type) once every 1,000 hours of operation, whichever occurs last.
- 4. Check and adjust the following once every year or after no more than 1,000 hours of operation, whichever occurs last:
 - a. intake and exhaust valves
 - b. spark plugs (if so equipped)
 - c.. spark timing and dwell or fuel injection timing (if adjustable), and
 - d.. carburetor mixture (if adjustable).

- 5. Spark Plugs and Ignition Points: replace after 3,000 hours of operation or every year whichever occurs last
- 6. Coolant: change after 3,000 hours of operation or every year whichever occurs last.
- 7. Exhaust System: check for leaks and/or restrictions after 3,000 hours of operation or every year whichever occurs last.

D. Limitations – Opacity

The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20% opacity.

[Maricopa County Rule 324 §303]

E. Additional Limitations for Prime Engines > 250 Rated bhp

In addition to meeting the standards in Sections III.B, III.C, and III.D of this Attachment, each existing or new prime engine greater than 250 rated bhp that is not listed in Sections 103, 104, or 105 of the Maricopa County Rule 324, shall comply with the emissions limits or control technology requirements listed in the Table 1, 2, or 3, dependent upon the type of engine.

[Maricopa County Rule 324 §304]

NOx EMISSION LIMITS OR CONTROL TECHNOLOGY REQUIREMENTS FOR EXISTING COMPRESSION-IGNITION ENGINES > 250 bhp

TABLE 1

RATED E	BRAKE HORSEPOWER (bhp)	ENGINE REQUIREMENTS
250-399		770 ppmdv or 10 g/bhp-hr.NOx or turbocharger with aftercooler/intercooler or 4-degree injection timing retard
400 plus		550 ppmdv or 7.2 g/bhp-hr.NOx or turbocharger with aftercooler/intercooler or 4-degree injection timing retard

EMISSION LIMITS OR CONTROL TECHNOLOGY REQUIREMENTS FOR EXISTING APPLICABLE SPARK- IGNITION ENGINES > 250 RATED bhp

TABLE 2

OXIDES OF NITROGEN (NOx)	VOLATILE ORGANIC COMPOUND (VOC)	CARBON MONOXIDE (CO)
280 ppmdv or 4.0 b/bhp-hr or three-way catalyst*	800 ppmdv or 5.0 g/bhp-hr or three-way catalyst*	4,500 ppmdv or three-way catalyst*

*The three-way catalyst shall provide a minimum of 80% control efficiency for NOx and CO for those engines fueled with natural gas, propane or gasoline. In addition the three-way catalyst shall also provide a minimum of at least 50% control efficiency for VOC for those engines fueled by gasoline.

EMISSION LIMITS FOR NEW SPARK OR COMPRESSION-IGNITION ENGINES > 250 bhp

TABLE 3

ENGINE TYPE	NOx	PM**	CO
LEAN BURN (SPARK)	110 ppmdv or 1.5 g/bhp-hr.	Not Applicable	4,500 ppmdv
RICH BURN (SPARK)	20 ppmdv or 0.30 g/bhp-hr.	Not Applicable	4,500 ppmdv
COMPRESSION	530 ppmdv or 6.9 g/bhp-hr.	0.40 g/bhp-hr	1,000 ppmdv

^{**} A backhalf analysis shall be performed using reference Method 202 (referenced in subsection 504.6) each time a compliance test for particulate matter emissions to meet the limitations listed in Table 3 is performed using Method 5. The results of the Method 202 testing shall be used for emissions inventory purposes.

[Maricopa County Rule 324 §304]

F. Efficiency Allowance

Each emission limit expressed in Tables 1, 2 or 3 may be multiplied by X, where X equals the engine efficiency (E) divided by a reference efficiency of 30 percent. Engine efficiency shall be determined by one of the following methods whichever is higher:

[Maricopa County Rule 324 §305]

1. $E = (Engine Output) X (100) \div (Energy Input)$

where energy input is determined by a fuel measuring device accurate to \pm 5 % and is based upon the higher heating value (HHV) of the fuel. Percent efficiency (E) shall be averaged over 15 consecutive minutes and measured at peak load for the applicable engine.

2. $E = (Manufacturers Rated Efficiency [Continuous] at (LHV) X (LHV) <math>\div$ (HHV)

where LHV = the lower heating value of the fuel Engine efficiency (E) shall not be less than 30 percent; an engine with an efficiency lower than 30 percent shall be assigned an efficiency of 30 percent for the purposes of this rule.

G. Equivalent or Identical Engine Replacement

An equivalent or identical replacement engine that replaces an existing engine shall be treated as an existing engine for the purposes of compliance with this rule, unless the engine commenced operation or was constructed or modified after October 22, 2003, including the contractual obligation to undertake and complete an order for an engine and then it will be considered a new engine for purposes of meeting the standards for a new engine in this rule.

H. Compliance Schedule

The Permittee of an existing stationary IC engine that must be replaced with a new engine to meet emission limits listed in Section III.A through Section III.G of this Attachment shall be in compliance with the emission limits listed in Section III.E of this Attachment, Table 3 by October 22, 2007.

[Maricopa County Rule 324 §401]

I. Compliance Determination

1. Existing Engines

Existing IC engines or engine families shall demonstrate compliance with Section III by recordkeeping according to Section III.E. Emission testing using the applicable test methods listed in Section III.K shall be performed if the Director requests.

[Maricopa County Rule 324 §501.1]

2. Existing Engine Families at a Source

When testing an engine family at one source, the number of engines tested should be the greater of either one engine or one third of all identical engines in the group. If any of the representative engines exceed the emission limits, each engine in the group shall demonstrate compliance by emissions testing.

[Maricopa County Rule 324 §501.2]

3. New Engines / New Engine Families

[Maricopa County Rule 324 §501.3]

Compliance with the limitations listed in Section III.E of this Attachment, Table 3 shall be demonstrated by either:

- a. A statement from the manufacturer that the engine meets the most stringent emissions standards found in 40 CFR Part 89 or 90 applicable to the engine and its model year at the time of manufacture or
- b. Performance of emission testing using the test methods listed in Section III.K of this Attachment.

4. Low Sulfur Oil Verification

If the Director requests proof of the sulfur content, the owner or operator shall submit fuel receipts, contract specifications, pipeline meter tickets, Material Safety Data Sheets (MSDS), fuel supplier information or purchase records, if applicable, from the fuel supplier, indicating the sulfur content of the fuel oil. In lieu of these, testing of the fuel oil for sulfur content to meet the 0.05% limit shall be permitted if so desired by the owner or operator for evidence of compliance.

[Maricopa County Rule 324 §501.4]

5. Waste - Derived Fuel Sulfur Verification

The Permittee shall submit documentation of the concentration of the sulfur level of the

6. Test Method Conditions

The Permittee shall use the test methods listed in Section III.K of this Attachment to determine compliance with the limitations in Section III.E, Tables 1-3 of this Attachment. Testing for stationary IC engines shall be completed under steady state conditions at either the maximum operating load or no less than 80% of the rated brake horsepower rating. If the Permittee of an engine demonstrates to the Director that the engine cannot operate at these conditions, then emissions source testing shall be performed at the highest achievable continuous brake horsepower rating or under the typical duty cycle or typical operational mode of the engine.

[Maricopa County Rule 324 §501.6]

J. Recordkeeping / Record Retention

The Permittee of any stationary IC engine subject to this rule shall comply with the following requirements and keep records for a period of 5 years:

1. The Permittee of any IC engine, including emergency engines, prime engines and low usage engines, shall keep a record that includes an initial one time entry that lists the particular engine combustion type (compression or spark-ignition or rich or lean burn); manufacturer; model designation, rated brake horsepower, serial number and where the engine is located on the site.

[Maricopa County Rule 324 §502.1]

- 2. The Permittee of a prime engine shall maintain a monthly record for prime engines which shall include: [Maricopa County Rule 324 §502.2]
 - a. Hours of operation;
 - b. Type of fuel used, and
 - Documentation verifying compliance with sulfur fuel content according to Subsection III.B.1 of Attachment "D".
- 3. The Permittee of a prime engine shall maintain an annual record of good combustion procedures according to Section III.C of this Attachment.

[Maricopa County Rule 324 §502.3]

K. Test Methods Incorporated By Reference

[Maricopa County Rule 324 §503]

The Environmental Protection Agency (EPA) test methods as they exist in the Code of Federal Regulations (CFR) (July 1, 2004) and the American Society of Testing Materials International Methods as listed below, are incorporated by reference in Appendix G of the Maricopa County Rules and Regulations. The when more than one test method is permitted for the same determination, as listed in Subsections III.K.12, III.K.13, III.K.14, or III.K.15 of Attachment "D", an exceedance of the limits established in this rule determined by any of the applicable test methods constitutes a violation. Copies of test methods referenced in this section of this rule are

available at the Maricopa County Environmental Services Department, 1001 North Central Avenue, Suite 201, Phoenix, Arizona, 85004 -1942.

- 1. EPA Reference Methods 1 ("Sample and Velocity Traverses for Stationary Sources") and 1A ("Sample and Velocity Traverses for Stationary Sources with Small Stacks and Ducts") (40 CFR 60, Appendix A).
- 2. EPA Reference Methods 2 ("Determination of Stack Gas Velocity and Volumetric Flow Rate"), 2A ("Direct Measurement of Gas Volume Through Pipes and Small Ducts"), 2C ("Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts"), and 2D ("Measurement of Gas Volumetric Flow Rates in Small Pipes and Ducts") (40 CFR 60, Appendix A).
- 3. EPA Reference Methods 3 ("Gas Analysis for the Determination of Dry Molecular Weight"), 3A ("Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure"), 3B ("Gas Analysis for the Determination of Emission Rate Correction Factor of Excess Air"), and 3C ("Determination of Carbon Dioxide, Methane, Nitrogen and Oxygen from Stationary Sources") (40 CFR 60, Appendix A).
- 4. EPA Reference Method 4 ("Determination of Moisture Content in Stack Gases") (40 CFR 60, Appendix A).
- 5. EPA Reference Method 5 ("Determination of Particulate Emissions from Stationary Sources") (40 CFR 60, Appendix A)
- 6. EPA Reference Method 202 ("Determination of Condensable Particulate Emissions from Stationary Sources") (40 CFR 51, Appendix M).
- 7. EPA Reference Methods 7 ("Determination of Nitrogen Oxide Emissions from Stationary Sources"), 7A ("Determination of Nitrogen Oxide Emissions form Stationary Sources Ion chromatographic method"), 7B ("Determination of Nitrogen Oxide Emissions from Stationary Sources Ultraviolet Spectrometry"), 7C ("Determination of Nitrogen Oxide Emissions from Stationary Sources Alkaline-Permanganate Colorimetric Method"), 7D ("Determination of Nitrogen Oxide Emissions from Stationary Sources Alkaline Permanganate Chromatographic Method"), and 7E ("Determination of Nitrogen Oxide Emissions from Stationary Sources Instrumental Analyzer Method"), (40 CFR 60, Appendix A).
- 8. EPA Reference Method 9 ("Visual Determination of the Opacity of Emissions from Stationary Sources") (40 CFR 60, Appendix A).
- 9. EPA Reference Method 10 ("Determination of Carbon Monoxide from Stationary Sources") (40 CFR 60, Appendix A).
- 10. EPA Reference Method 18 ("Measurement of Gaseous Organic Compound Emissions by Gas Chromatography") (40 CFR 60, Appendix A).
- 11. EPA Reference Method 25A ("Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer") (40 CFR 60, Appendix A).

- 12. American Society of Testing Materials International, ASTM Method D1266-98 ("Standard Test Method for Sulfur in Petroleum Products (Lamp Method)"), 1998.
- 13. American Society of Testing Materials International, ASTM Method D2622-98 ("Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry"), 1998.
- 14. American Society of Testing Materials International, ASTM Method D2880-71, 78 or 96 ("Standard Specification for Gas Turbine Fuel Oils"), 1971 or 1978 or 1996.
- 15. American Society of Testing Materials International, ASTM Method D4294-98 ("Standard Test Method for Sulfur in Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectroscopy") 1990 or 1998.
- 16. American Society of Testing Materials International, ASTM Method D5504-01("Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence), 2006.

L. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with Maricopa County Rule 324 §102, Maricopa County Rule 324 §302, Maricopa County Rule 324 §303, Maricopa County Rule 324 §304, Maricopa County Rule 324 §305, Maricopa County Rule 324 §306, Maricopa County Rule 324 §401, Maricopa County Rule 324 §501.1, Maricopa County Rule 324 §501.2, Maricopa County Rule 324 §501.3, Maricopa County Rule 324 §501.4, Maricopa County Rule 324 §501.5, Maricopa County Rule 324 §501.6, Maricopa County Rule 324 §502.1, Maricopa County Rule 324 §502.3, Maricopa County Rule 324 §503.

[A.A.C. R18-2-325]

IV. OTHER PERIODIC ACTIVITY REQUIREMENTS

A. Abrasive Blasting

1. Applicability

These conditions shall apply to all abrasive blasting operations unless they meet the following criteria:

- a. Are self-contained, enclosed abrasive blasting equipment that is not vented to the atmosphere or is vented inside a building with the exhaust directed away from any opening to the building exterior, or
- b. Hydroblasting.

[Maricopa County Rule 312 §103]

2. Limitations for Blasting

All abrasive blasting operations shall be performed in a confined enclosure, unless one of the following conditions are met, in which case unconfined blasting according to Section IV.A.3 of Attachment "D" may be performed:

[Maricopa County Rule 312 §301]

- a. The item to be blasted exceeds 8 feet in any one dimension, or
- b. The surface being blasted is fixed in a permanent location, cannot easily be moved into a confined enclosure, and the surface is not normally dismantled or moved prior to abrasive blasting

3. Requirements for unconfined blasting:

At least one of the following control measures shall be used;

[Maricopa County Rule 312 §302]

- a. Wet abrasive blasting,
- b. Vacuum blasting, or
- c. Dry abrasive blasting, provided that all of the following conditions are met:
 - i. Perform only on a metal substrate.
 - ii. Use only certified abrasive for dry unconfined blasting.
 - ii. Blast only paint that is lead free (i.e. the lead content is less than 0.1 percent).
 - iv. Perform the abrasive blasting operation directed away from unpaved surfaces.
 - v. Use the certified abrasive not more than once unless contaminants are separated from the abrasive through filtration and the abrasive conforms to its original size.

4. Requirements for confined blasting

Dry abrasive blasting in a confined enclosure with a forced air exhaust shall be conducted by implementing either of the following:

[Maricopa County Rule 312 §303]

- a. Using a certified abrasive, or
- b. Venting to an ECS.
- 5. Requirements for ECS and Monitoring Devices:
 - a. The following requirements apply to blasting equipment that vents through a required ECS and requires a permit under Rule 200 of the Maricopa County Regulations. Buildings and/or enclosures are not considered control equipment. Equipment that meets the following two criteria and is operated and maintained in accordance with manufacturer's specifications is exempt from the requirements of this section:

[Maricopa County Rule 312 §304]

i. Is self-contained and the total internal volume of the blast section is 50

cubic feet or less, and

- ii. Is vented to an ECS.
- b. Operation and Maintenance (O&M) Plan Required for Emission Control System (ECS): [Maricopa County Rule 312 §304.1]
 - The Permittee shall provide and maintain, ready available at all times, an O & M Plan for any ECS, other emission processing equipment, and ECS monitoring devices that are used pursuant to this Condition or to an air pollution control permit.
 - ii. The Permittee shall submit to the Director for approval the O & M Plans of each ECS and each ECS monitoring device that is used pursuant to this Condition.
 - iii. The Permittee shall comply with all the identified actions and schedules provided in each O & M Plan.
- c. Installing and Maintaining ECS Monitoring Devices

The Permittee operating an ECS pursuant to this Condition shall properly install and maintain in calibration, in good working order and in operation, devices described in the facility's O & M Plan that indicate temperatures, pressures, rates of flow, or other operating conditions necessary to determine if air pollution control equipment is function properly.

[Maricopa County Rule 312 §304.2]

6. Opacity Limitation

No Permittee shall discharge into the atmosphere from any abrasive blasting operation any air contaminant for an observation period or periods aggregating more than three minutes in any sixty minute period an opacity equal to or greater than 20 percent. An indicated excess will considered to have occurred if any cumulative period of 15-second increments totaling more than three minutes within any sixty minute period was in excess of the opacity standard.

[Maricopa County Rule 312 §305]

7. Wind Event

No dry unconfined abrasive blasting operation shall be conducted during a wind event.

[Maricopa County Rule 312 §306]

8. Traffic Markers

Surface preparation for raised traffic delineating markers and pavement marking removal using abrasive blasting operations shall be performed by wet blasting, Hydroblasting or vacuum blasting. Dry blasting may be performed using only certified abrasives when:

[Maricopa County Rule 312 §307]

a. Removing pavement markings of less than 1,000 square feet

b. Performing surface preparation for raised traffic delineating markers of less than 1,000 square feet.

9. Work Practices

[Maricopa County Rule 312 §308]

a. Unconfined Blasting

The Permittee shall clean up spent abrasive material with a potential to be transported during a wind event and, until removal occurs, shall at a minimum, meet the provisions of Section V of this Attachment.

b. Confined Blasting

At the end of the work shift the owner or operator shall clean up spillage, carryout, and/or trackout of any spent abrasive material with a potential to be transported during a wind event.

10. Compliance Schedule

All abrasive blasting operations shall be conducted in compliance with this condition upon adoption. [Maricopa County Rule 312 §401]

11. Monitoring, Recordkeeping and Reporting

At a minimum, the Permittee subject to this Condition shall keep the following records onsite that are applicable to all abrasive blasting operations. Additional reporting requirements are listed in Condition VI.A.2 of Attachment "B".

[Maricopa County Rule 312 §501]

- a. If blasting operations occur daily or are a part of a facility's primary work activity, then the following shall be kept as a record:
 - i. A list of the blasting equipment,
 - ii. The description of the type of blasting as confined, unconfined, sand, wet, or other,
 - iii. The locations of the blasting equipment or specify if the equipment is portable,
 - iv. A description of the ECS associated with the blasting operations,
 - v. The days of the week blasting occurs, and
 - v. The normal hours of operation.
- b. If blasting operations occur periodically, then the following shall be kept as a record:
 - i. The date the blasting occurs,

- ii. The blasting equipment that is operating,
- iii. A description of the type of blasting, and
- iv. A description of the ECS associated with the blasting operations,
- c. The type and amount of solid abrasive material consumed on a monthly basis. Include name of certified abrasive used, as applicable.
- d. Material Safety Data Sheets (MSDS) or results of any lead testing that was performed on paint that is to be removed via unconfined blasting, as applicable.

12. Records Retention

Copies of reports, logs, and supporting documentation required by this Condition shall be retained for at least 5 years at permitted Title V sources and for at least 2 years at Non-Title V sources.

[Maricopa County Rule 312 §502]

13. Compliance Determination

a. Control Device Efficiency—Manufacturer's specifications, testing results or engineering data that demonstrate control efficiency shall be submitted upon request of the Director.

[Maricopa County Rule 312 §503.1]

b. Paint Lead Level—Prior to unconfined blasting of paint, the Permittee must be the generator with firsthand knowledge of lead content in the paint, or retain evidence of the lead level from the material MSDS or from a lead test performed in accordance with Section IV.A.16 of this Attachment. Unconfined blasting is prohibited if the lead content of the material is > 0.1

14. Certified Abrasives List Adopted By Reference

The list of abrasives certified for permissible dry unconfined blasting is found in Executive Order G-00-066 in accordance with the California Code of Regulations, Subchapter 6, Title 17, Section 92530, Exhibit A effective as of December 26, 2000 and is adopted by reference. A copy of the list of currently certified abrasives can also be obtained at Maricopa County Environmental Services, 1001 North Central Avenue, Phoenix, AZ 85004-1942.

[Maricopa County Rule 312 §504]

15. Opacity Observations

Opacity shall be determined by observations of visible emissions conducted in accordance with EPA Reference Method 9 and with the following provisions:

[Maricopa County Rule 312 §505]

a. Emissions from unconfined blasting shall be observed at the densest point of the emission from the closest point of discharge, after a major portion of the spent abrasives has fallen out.

- b. Emissions from unconfined blasting employing multiple nozzles shall be considered a single source unless it can be demonstrated by the Permittee that each nozzle, evaluated separately, meets the emission standards of this condition.
- c. Emissions from confined blasting shall be observed at the densest point after the air contaminant leaves the enclosure or associated ECS.

16. Test Methods Adopted By Reference

The EPA test methods as they exist in the Code of Federal Regulations (CFR), July 1, 2001, as listed below, are adopted by reference. This adoption by reference includes no future editions or amendments. Copies of these test methods may be obtained at the Maricopa County Environmental Services Department—Air Quality Division, 1001 North Central Avenue Suite 200, Phoenix, AZ 85004-1942. When more than one test method as listed in Sections IV.A.16.b through IV.A.16.g of this Attachment, is permitted for the same determination, an exceedances of the limits established in this section determined by any of the applicable test methods constitutes a violation.

[Maricopa County Rule 312 §506]

- a. EPA Test Method 9 (Visual Determination of the Opacity of Emissions from Stationary Sources") (40CFR40, Appendix A).
- b. EPA Test Method for Evaluating Solid Wastes (Lead), SW-846 Method 6010B (Inductively Coupled Plasma-Atomic Emission Spectrometry).
- c. EPA Test Method for Testing Lead by Atomic Absorption, Direct Aspiration, Method 0239.2 (EPA Report 600/4-79-020).
- d. EPA Test Method for Testing Lead, SW-846 Method 3050B (Acid Digestion of Sediments, Sludges and Soils).
- e. EPA Test Method for Testing Lead, SW-846 Method 7420 (Lead (Atomic Absorption, Direct Aspiration).
- f. OSHA Method ID-121 (Metal and Metalloid Particulates in Workplace Atmospheres [Atomic Absorption]).
- g. OSHA Method ID-125G (Metal and Metalloid Particulates in Workplace Atmospheres [ICP Analysis]).

B. Spray Coating Operations

To limit the emission of particulate matter to the atmosphere from spray coating operations.

[Maricopa County Rule 315§101]

1. Controls Required

The Permittee shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

a. Equipment Operated In Enclosures Located Outside a Building:

Spray coating equipment shall be operated inside an enclosure which has at least three sides a minimum of eight feet in height and able to contain any object or objects being coated.

i. Three-Sided Enclosures:

Spray shall be directed in a horizontal or downward pointing manner so that overspray is directed at the walls or floor of the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of the top of the enclosure.

ii. More Complete Enclosures:

For enclosures with three sides and a roof or complete enclosures, spray shall be directed into the enclosure so that the overspray is directed away from any opening in the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of any open top of the enclosure.

b. Equipment Operated With Forced Air Exhaust Vented Directly Outside:

[Maricopa County Rule 315§301.2]

Any spray booth or enclosure with forced air exhaust must have a filtering system with an average overspray removal efficiency of at least 92% by weight for the type of material being sprayed. No gaps, sags or holes shall be present in the filters and all exhaust must be discharged into the atmosphere. Spray Booths or enclosures utilizing a water curtain, waterfall or other means to capture particulates in a liquid medium shall effectively remove at least 92% of the overspray and be operated in a manner consistent with the manufacturer's specifications to achieve such efficiency for the type of material being sprayed.

2. Exemptions

[Maricopa County Rule 315 §302]

The controls required in Section IV.B.1 of Attachment "C" shall not apply if any of the following are applicable:

- a. To the spray coating of buildings or dwellings, including appurtenances and any other ornamental objects that are not normally removed prior to coating.
- b. To the spray coating of facility equipment or structures which are fixed in a permanent location and cannot easily be moved into an enclosure or spray booth and which are not normally dismantled or moved prior to coating.
- c. To the spray coating of objects which cannot fit inside of an enclosure with internal dimensions of 10'WX25'X8'H.
- d. To enclosures and spray booths and exhausts located entirely in a completely enclosed building, providing that any vents or openings do not allow overspray to be emitted into the outside air.

e. To any coating operations utilizing only hand-held aerosol cans.

3. Test Methods Adopted By Reference

Determination of filter efficiency shall be determined by either ASHRAE Standard 52-76 (publication date of May 1976) or by Test Method 319 (40 CFR 63, Appendix A, publication date of July 1, 1999). These methods are adopted by reference. This adoption by reference includes no future editions or amendments. Copies of the test methods referenced in this section are available at the Maricopa County Environmental Services Department, 1001 North Central Avenue, Suite 201, Phoenix, Arizona 85004-1942.

[Maricopa County Rule 315 §501]

V. FUGITIVE DUST FROM DUST GENERATING OPERATIONS

A. General Requirements for Dust Generating Operations

If the Permittee is engaged in a dust-generating operation they are subject to the standards and/or requirements of this Section. This includes weekends, after work hours, and on holidays. Failure to comply with any of the requirements listed below shall constitute a violation.

[Rule 310 §301]

- 1. Visible emissions requirements from dust-generating operations described in Section V.C and V.D of Attachment "D".
- 2. Stabilization requirements described in Section V.E of Attachment "D".
- 3. Control measures described in Section V.F of Attachment "D".
- 4. Trackout, carry-out, spillage, and/or erosion requirements described in Section V.G of Attachment "D".
- 5. Soil moisture requirements described in Section V.H of Attachment "D".
- 6. Dust control training class requirements described in Section V.J of Attachment "D".
- 7. Dust Control Plan requirement described in Section V.L of Attachment "D".
- 8. Monitoring and recordkeeping requirements described in Section V.N of Attachment "D".
- 9. Any other requirements of this Section.

B. Dust Generating Operation

Any activity capably of generation fugitive dust, including but not limited to, the following activities:

- 1. Land clearing, maintenance, and land cleanup using mechanized equipment.
- 2. Earthmoving

- 3. Weed abatement by discing or blading
- 4. Excavating
- 5. Construction
- 6. Demolition

C. Opacity and Visible Emission Limitations:

The Permittee of a dust generating operation shall not allow visible fugitive dust emissions to exceed the limits listed in either one of the following:

1. The Permittee of a dust generating operation shall not cause or allow visible fugitive dust emissions to exceed 20% opacity.

[Rule 310 §303.1.a]

2. The Permittee of a dust generating operation shall not cause or allow visible fugitive dust emissions to remain visible in the atmosphere beyond the property line within the emissions are generated.

[Rule 310 §303.1.b]

D. Exemptions from Dust Generating Operation Opacity Limitation Requirement:

1. Wind Event:

Exceedances of the opacity limit described in Section V.C of Attachment "D" that occur due to a wind event shall constitute a violation of the opacity limit. However, it shall be an affirmative defense in an enforcement action if the owner and/or operator demonstrates all of the following conditions:

- a. All control measures required were followed and one or more of the following control measures were applied and maintained;
 - i. For dust-generating operations:
 - (a) Cease dust-generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 miles per hour and if dust-generating operations are ceased for the remainder of the work day, stabilize the area;
 - (b) Apply water or other suitable dust suppressant at least twice per hour to dust-generating operations in the PM₁₀ nonattainment area and at least once per hour to dust-generating operations outside the PM₁₀ nonattainment area;
 - (c) Apply water as necessary to maintain soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or

- other equivalent method as approved by the Director and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent method approved by the Director and the Administrator, maintain at least 70% of the optimum soil moisture content; or
- (d) Implement Section V.D.1.a.i(b) or Section V.D.1.a.i(c) of Attachment "D" and construct fences or three-foot to five-foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas to reduce the amount of wind-blown material leaving a site.
- ii. For temporary disturbed surface areas, including but not limited to, after work hours, weekends, and holidays:
 - (a) Uniformly apply and maintain surface gravel or dust suppressants;
 - (b) Apply water to all disturbed surface areas three times per day. If there is any evidence of wind-blown dust, increase watering frequency to a minimum of four times per day;
 - (c) Apply water on open storage piles at least twice per hour to temporary disturbed surface areas in the PM10 nonattainment area and at least once per hour to temporary disturbed surface areas outside the PM_{10} nonattainment area; or
 - (d) Cover open storage piles with tarps, plastic, or other material such that wind will not remove the covering(s).
- b. The 20% opacity exceedance could not have been prevented by better application, implementation, operation, or maintenance of control measure(s);
- c. The Permittee compiled and retained records, in accordance with the Recordkeeping requirements of this Permit; and
- d. The occurrence of a wind event on the day(s) in question is documented by records. The occurrence of a wind event must be determined by the nearest Maricopa County Air Quality Department monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked.
- 2. Emergency Maintenance of Flood Control Channels and Water Retention Basins: The opacity limit described in Section V.C of Attachment "D" shall not apply to emergency maintenance of flood control channels and water retention basins, provided that control measures are implemented.
- 3. Activities Near the Property Line: The opacity limit described in Section V.C.2 of Attachment "D" shall not apply to dust-generating operations conducted within 25 feet of the property line.

[Rule 310 §303.2]

E. Stabilization Requirements for Dust-Generating Operations:

- 1. Unpaved Parking Lot: The Permittee of any unpaved parking lot shall not allow visible fugitive dust emissions to exceed 20% opacity, and either:
 - a. Shall not allow silt loading equal to or greater than 0.33 oz/ft², or
 - b. Shall not allow the silt content to exceed 8%.

2. Unpaved Haul/Access Road:

- a. The Permittee of any unpaved haul/access road (whether including at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall not allow visible fugitive dust emissions to exceed 20% opacity, and either:
 - i. Shall not allow silt loading equal to or greater than 0.33 oz/ft²; or
 - ii. Shall not allow the silt content to exceed 6%.
- b. The Permittee of any unpaved haul/access road (including at a work site that is under construction or a work site that is temporarily or permanently inactive) shall, as an alternative to meeting the stabilization requirements for an unpaved haul/access road, limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this subsection, the owner and/or operator must include, in a Dust Control Plan, the maximum number of vehicle trips on the unpaved haul/access roads each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.
- 3. Open Area and Vacant Lot or Disturbed Surface Area: The Permittee of an open area and/or vacant lot or any disturbed surface area on which no activity is occurring (including at a work site that is under construction or a work site that is temporarily or permanently inactive) shall meet at least one of the standards described below, as applicable. Should a disturbed open area and/or vacant lot or any disturbed surface area on which no activity is occurring contain more than one type of disturbance, soil, vegetation, or other characteristics, which are visibly distinguishable, the owner and/or operator shall test each representative surface separately for stability, in an area that represents a random portion of the overall disturbed conditions of the site, according to the appropriate test methods in Appendix C - Fugitive Dust Test Methods Maricopa County Rules - Maricopa County Fugitive Dust Test Methods, and include or eliminate it from the total size assessment of disturbed surface area(s) depending upon test method results. The owner and/or operator of such inactive disturbed surface area shall be considered in violation of this permit if the area is not maintained in a manner that meets at least 1 of the standards listed below, as applicable.
 - a. Maintain a soil crust:
 - b. Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;
 - c. Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached

- vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%;
- d. Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%;
- e. Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements:
- f. Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or
- g. Comply with a standard of an alternative test method, upon obtaining the written approval from the Director and the Administrator of the Environmental Protection Agency (EPA).

[Rule 310 §304]

F. Control Measures for Dust-Generating Operations:

When engaged in a dust-generating operation, the Permittee shall install, maintain, and use control measures, as applicable. The Permittee of a dust-generating operation shall implement control measures before, after, and while conducting dust-generating operations, including during weekends, after work hours, and on holidays. At least one primary control measure and one contingency control measure must be identified in the Dust Control Plan for all dust-generating sources. The Permittee shall implement the following dust control measures as applicable:

- 1. Off-Site Hauling onto Paved Areas Accessible to the Public: The Permittee of a dust-generating operation that involves off-site hauling shall implement the following control measures:
 - a. When cargo compartment is loaded:
 - i. Load all haul trucks such that the freeboard is not less than three inches;
 - ii. Load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of a cargo container area;
 - iii. Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and
 - iv. Cover cargo compartment with a tarp or other suitable closure.
 - b. When cargo compartment is empty:
 - i. Clean the interior of the cargo compartment; or
 - ii. Cover the cargo compartment with a tarp or other suitable closure.
 - c. When off-site hauling, install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires

and the exterior surfaces of haul trucks and/or motor vehicles that traverse the site.

[Rule 310 §305.1]

- 2. Bulk Material Hauling/Transporting When On-Site Hauling/Transporting Within the Boundaries of the Work Site but not Crossing a Paved Area Accessible to the Public: The Permittee of a dust-generating operation that involves bulk material hauling/transporting when on-site hauling/transporting within the boundaries of the work site but not crossing a paved area accessible to the public shall implement one of the following control measures:
 - a. Limit vehicle speed to 15 miles per hour or less while traveling on the work site;
 - b. Apply water to the top of the load; or
 - c. Cover haul trucks with a tarp or other suitable closure.

[Rule 310 §305.2]

- 3. Bulk Material Hauling/Transporting When On-Site Hauling/Transporting Within the Boundaries of the Work Site and Crossing and/or Accessing a Paved Area Accessible to the Public: The Permittee of a dust-generating operation that involves bulk material hauling/transporting when on-site hauling/transporting within the boundaries of the work site and crossing and/or accessing a paved area accessible to the public shall implement all of the following control measures:
 - a. Load all haul trucks such that the freeboard is not less than three inches;
 - b. Load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of a cargo container area;
 - c. Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and
 - d. When crossing and/or accessing a paved area accessible to the public, install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse the site.

[Rule 310 §305.3]

- 4. Bulk Material Stacking, Loading, and Unloading Operations: The Permittee of a dustgenerating operation that involves bulk material stacking, loading, and unloading operations shall implement at least one of the following control measures:
 - a. Spray material with water, as necessary, prior to stacking, loading, and unloading and/or while stacking, loading, and unloading; or
 - b. Spray material with a dust suppressant other than water, as necessary, prior to stacking, loading, and unloading and/or while stacking, loading, and unloading.

[Rule 310 §305.4]

5. Open Storage Piles: The Permittee of a dust-generating operation that involves an open storage pile shall implement the following control measures, as applicable:

- a. Prior to and/or while conducting stacking, loading, and unloading operations, implement one of the following control measures:
 - i. Spray material with water, as necessary; or
 - ii. Spray material with a dust suppressant other than water, as necessary.
- b. When not conducting stacking, loading, and unloading operations, implement one of the following control measures:
 - i. Cover all open storage piles with a tarp, plastic, or other material to prevent wind from removing the covering(s)/such that the covering(s) will not be dislodged by wind; or
 - ii. Apply water to maintain soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent methods approved by the Director and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent methods approved by the Director and the Administrator, maintain at least 70% of the optimum soil moisture content.
 - iii. Maintain a soil crust; or
 - iv. Implement the control measure described in Section V.F.5.b.ii or in Section V.F.5.b.iii of this Permit Condition and construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is no more than twice the height of the pile, whose height is equal to the pile height, and whose porosity is no more than 50%.

[Rule 310 §305.5]

- 6. Unpaved Staging Areas, Unpaved Parking Areas, and Unpaved Material Storage Areas: The Permittee of a dust-generating operation that involves unpaved staging areas, unpaved parking areas, and unpaved material storage areas shall implement one or more of the following control measures:
 - a. Apply water so that the surface is visibly moist;
 - b. Pave;
 - c. Apply and maintain gravel, recycled asphalt, or other suitable material;
 - d. Apply and maintain a suitable dust suppressant other than water; or
 - e. Limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this section, the owner and/or operator shall provide to the Director the maximum number of vehicle trips on the staging areas, parking areas, and/or material storage areas each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

[Rule 310 §305.6]

- 7. Unpaved Haul/Access Roads: The Permittee of a dust-generating operation that involves unpaved haul/access roads shall implement one or more of the following control measures:
 - a. Apply water so that the surface is visibly moist;
 - b. Pave;
 - c. Apply and maintain gravel, recycled asphalt, or other suitable material;
 - d. Apply and maintain a suitable dust suppressant other than water; or
 - e. Limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this section of this rule, the owner and/or operator shall provide to the Director the maximum number of vehicle trips on the unpaved haul/access roads each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

[Rule 310 §305.7]

- 8. Weed Abatement by Discing or Blading: The Permittee of a dust-generating operation that involves weed abatement by discing or blading shall comply with all of the following control measures:
 - a. Before weed abatement by discing or blading occurs, apply water;
 - b. While weed abatement by discing or blading is occurring, apply water; and
 - c. After weed abatement by discing or blading occurs, pave, apply gravel, apply water, apply a suitable dust suppressant other than water, or establish vegetative ground cover.

[Rule 310 §305.8]

- 9. Disturbed Surface Areas: The Permittee of a dust-generating operation that involves disturbed surface areas shall implement the following control measures, as applicable:
 - a. Before disturbed surface areas are created, implement one of the following control measures:
 - i. Pre-water site to depth of cuts, allowing time for penetration; or
 - ii. Phase work to reduce the amount of disturbed surface areas at any one time.
 - b. While disturbed surface areas are being created, implement one of the following control measures:
 - i. Apply water or other suitable dust suppressant other than water, as necessary;
 - ii. Apply water as necessary to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other

equivalent method as approved by the Director and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent method approved by the Director and the Administrator, maintain at least 70% of the optimum soil moisture content; or

- iii. Implement control measure described in Section V.F.9.b.i or Section V.F.9.b.ii of this Permit Condition and construct fences or three-foot to five-foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas to reduce the amount of windblown material leaving a site.
- c. When the dust-generating operation is finished for a period of 30 days or longer for longer than temporary pauses that occur during a dust-generating operation, the owner and/or operator shall implement one or more of the following control measures within ten days following the completion of such dust-generating operation:
 - i. Pave, apply gravel, or apply a suitable dust suppressant other than water;
 - ii. Establish vegetative ground cover in sufficient quantity;
 - iii. Implement control measures described in Section V.F.11.c.i or Section V.F.11.c.ii of Attachment "D" and restrict vehicle access to the area;
 - iv. Apply water and prevent access by fences, ditches, vegetation, berms, or other suitable barrier or means sufficient to prevent trespass as approved by the Director; or
 - v. Restore area such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions.

[Rule 310 §305.11]

- 10. Easements, Rights-of-Way, and Access Roads for Utilities (Transmission of Electricity, Natural Gas, Oil, Water, and Gas) Associated With Sources That Have A Non-Title V Permit, A Title V Permit, and/or A General Permit Under These Rules: The Permittee of a dust-generating operation that involves an easement, right-of-way, and access road for utilities (transmission of electricity, natural gas, oil, water, and gas) associated with sources that have a Title V permit, a Non-Title V permit, and/or a General permit under these rules shall implement at least one of the following control measures:
 - a. Inside Area A, limit vehicle speed to 15 miles per hour or less and vehicle trips to no more than 20 per day per road;
 - b. Outside Area A, limit vehicle trips to no more than 20 per day per road; or
 - c. Implement control measures described in Section g of this Permit Condition.

[Rule 310 §305.12]

G. Trackout, Carry-Out, Spillage, and/or Erosion:

The Permittee of a dust-generating operation shall prevent and control trackout, carry-out, spillage, and/or erosion.

1. Trackout Control Device:

- a. Criterion for Trackout Control Device: Install, maintain and use a suitable trackout control device that prevents and controls trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse the site at all exits onto paved areas accessible to the public from both of the following:
 - i. All work sites with a disturbed surface area of two acres or larger, and
 - ii. All work sites where 100 cubic yards of bulk materials are hauled on-site and/or off-site per day.
- b. Control Measures: For those work sites identified in Section V.G.1.a of Attachment "D", prevent trackout, carry-out, spillage, and/or erosion by implementing one of the following control measures:
 - i. At all exits onto paved areas accessible to the public, install a wheel wash system;
 - ii. At all exits onto paved areas accessible to the public, install a gravel pad to comply with Section 217 of this rule;
 - iii. At all exits onto paved areas accessible to the public, install a grizzly or rumble grate that consists of raised dividers (rails, pipes, or grates) a minimum of three inches tall, six inches apart, and 20 feet long, to allow a vibration to be produced such that dust is shaken off the wheels of a vehicle as the entire circumference of each wheel of the vehicle passes over the grizzly or rumble grate; or
 - iv. Pave starting from the point of intersection with a paved area accessible to the public and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.

[Rule 310 §306.1]

2. Clean Up of Trackout:

- a. Criterion for Clean Up of Trackout: Clean up, trackout, carry-out, spillage, and/or erosion from paved areas accessible to the public including curbs, gutters, and sidewalks, on the following time-schedule:
 - i. Immediately, when trackout, carry-out, or spillage extends a cumulative distance of 25 linear feet or more; and
 - ii. At the end of the workday, for all other trackout, carry-out, spillage, and/or erosion.

b. Control Measures:

i. Operate a street sweeper or wet broom with sufficient water, including but not limited to kick broom, steel bristle broom, Teflon broom, vacuum, at the speed recommended by the manufacturer and at the frequency(ies) described in this section of this rule; or

[Rule 310 §306.2]

H. Soil Moisture:

If water is the chosen control measure in an approved Dust Control Plan, the Permittee of a dust-generating operation shall operate a water application system on-site (e.g., water truck, water hose) while conducting any earthmoving operations on disturbed surface areas 1 acre or larger, unless a soil crust is maintained or the soil is sufficiently damp to prevent loose grains of soil from becoming dislodged.

[Rule 310 §307]

I. Project Information Sign for Dust-Generating Operations:

For all sites with a Dust Control permit that are five acres or larger, except for routine maintenance and repair done under a Dust Control Block permit, the Permittee shall erect and maintain a project information sign at the main entrance such that members of the public can easily view and read the sign at all times. Such sign shall have a white background, have black block lettering that is at least four inches high, and shall contain at least all of the following information:

- 1. Project name and Permittee's name;
- 2. Current Dust Control permit number and expiration date;
- 3. Name and local phone number of person(s) responsible for dust control matters;
- 4. Text stating: "Dust complaints? Call Maricopa County Air Quality Department (Insert the accurate Maricopa County Air Quality Department complaint line telephone number)."

[Rule 310 §308]

J. Dust Control Training Classes For Dust-Generating Operations:

1. Basic Dust Control Training Class:

- At least once every three years, the site superintendent or other designated on-site representative of the permit holder, if present at a site that has more than one acre of disturbed surface area that is subject to a permit issued by the Director requiring control of PM10 emissions from dust-generating operation, shall successfully complete a Basic Dust Control Training Class conducted or approved by the Director.
- b. At least once every three years, water truck and water-pull drivers shall successfully complete a Basic Dust Control Training Class conducted or approved by the Director.
- c. All persons having successfully completed training during the 2006 and 2007 calendar years shall be deemed to have satisfied the requirement to successfully complete the Basic Dust Control Training Class, if the training that was completed was conducted or approved by the Director. Completion of the Comprehensive Dust Control Training Class, as required in Section V.J.2 of Attachment "D", shall satisfy the requirement of this section of this permit.

2. Comprehensive Dust Control Training Class:

- a. At least once every three years, the Dust Control Coordinator, who meets the requirements of Section V.J of Attachment "D", shall successfully complete the Comprehensive Dust Control Training Class conducted or approved by the Director.
- b. All persons having successfully completed training during the 2006 and 2007 calendar years shall be deemed to have satisfied the requirement to successfully complete the Comprehensive Dust Control Training Class, if the training that was completed was conducted or approved by the Director.

[Rule 310 §309]

K. Dust Control Coordinator for Dust-Generating Operations:

- 1. The Permittee for any site of five acres or more of disturbed surface area subject to a permit issued by the Director requiring control of PM10 emissions from dust-generating operations shall have on-site at least one Dust Control Coordinator trained in accordance with Section V.J.2 of Attachment "D" at all times during primary dust-generating operations related to the purposes for which the Dust Control permit was obtained.
- 2. The Dust Control Coordinator shall have full authority to ensure that dust control measures are implemented on-site, including conducting inspections, deployment of dust suppression resources, and modifications or shut-down of activities as needed to control dust.
- 3. The Dust Control Coordinator shall be responsible for managing dust prevention and dust control on the site.
- 4. At least once every three years, the Dust Control Coordinator shall successfully complete a Comprehensive Dust Control Training Class conducted or approved by the Director.
- 5. The Dust Control Coordinator shall have a valid dust training certification identification card readily accessible on-site while acting as a Dust Control Coordinator.
- 6. The requirement for a Dust Control Coordinator shall lapse when all of the following actions/events/procedures occur:
 - a. The area of disturbed surface area becomes less than five acres;
 - b. The previously disturbed surface areas have been stabilized in accordance with/in compliance with the standards and/or requirements of this rule; and
 - c. The Dust Control permit holder provides notice to the Director of acreage stabilization.
- 7. The Permittee, who is required to obtain a single permit for multiple non-contiguous sites in accordance with Section V.L of Attachment "D", shall have on sites with greater than one acre of disturbed surface area at least one individual who is designated by the permittee as a Dust Control Coordinator trained in accordance with Section V.J.1 of Attachment "D" Basic Dust Control Training Class. The Dust Control Coordinator shall be present on-site at all times during primary dust-generating activities that are related to the purposes for which the permit was obtained.

L. Dust Control Plan:

- 1. The Permittee shall submit a Dust Control Plan to the Director that describes all fugitive dust control measures to be implemented pursuant to the Conditions of this Permit.
- 2. The Permittee of a dust-generating operation shall submit to the Director a Dust Control Plan with any application for a Dust Control permit. Applicants shall describe, in a Dust Control Plan, all control measures to be implemented before, after, and while conducting any dust-generating operation, including during weekends, after work hours, and on holidays.
- 3. A Dust Control Plan shall, at a minimum, contain all of the following information:
 - a. Name(s), address(es), and phone numbers of person(s) responsible for the submittal and implementation of the Dust Control Plan and responsible for the dust-generating operation.
 - b. A drawing, on 8½" x 11" paper, that shows:
 - i. Entire project site/facility boundaries,
 - ii. Acres to be disturbed with linear dimensions,
 - iii. Nearest public roads,
 - iv. North arrow, and
 - v. Planned exit locations onto paved areas accessible to the public.
 - c. Appropriate control measures, or a combination thereof, as described in Section V.F and Section V.G of Attachment "D", for every actual and potential dust-generating operation.
 - Control measures must be implemented before, after, and while conducting any dust-generating operation, including during weekends, after work hours, and on holidays.
 - ii. All required control measures and at least one contingency control measure must be identified for all dust-generating operations.
 - iii. A control measure that is not listed in Section V.F or in Section V.G of this Attachment may be chosen provided that such control measure is implemented to comply with the requirements described in Section V.A of Attachment "D".
 - iv. If complying with Section V.F.7, Control Measures for Dust-Generating Operations-Unpaved Haul/Access Roads of this rule, the Dust Control Plan must include the maximum number of vehicle trips on the unpaved haul/access roads each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks).
 - d. Dust suppressants to be applied, including all of the following product

specifications or label instructions for approved usage:

- i. Method, frequency, and intensity of application;
- ii. Type, number, and capacity of application equipment; and
- iii. Information on environmental impacts and approvals or certifications related to appropriate and safe use for ground application.
- e. Specific surface treatment(s) and/or control measures utilized to control material trackout and sedimentation where unpaved roads and/or access points join paved areas accessible to the public.
- 4. The Director shall approve, disapprove, or conditionally approve the Dust Control Plan, in accordance with the criteria used to approve, disapprove or conditionally approve a permit, as described in Rule 200 of the Maricopa County Rules. Failure to comply with the provisions of an approved Dust Control Plan is deemed a violation of this rule.
- 5. For construction projects one acre or larger, except for routine maintenance and repair done under a Dust Control Block Permit, a statement disclosing which of the four designated texture(s) of soil described in Appendix F of these rules is naturally present at or will be imported to the dust-generating operation. The measured soil content at a particular site shall take precedence over any mapped soil types, and whenever soils have been tested at a particular site, the test results should be relied on rather than the map in Appendix F in the Maricopa County Rules.
- 6. Should any primary control measure(s) prove ineffective, the owner and/or operator shall immediately implement the contingency control measure(s). If the identified contingency control measure is effective to comply with all of the requirements of this rule, the Permittee need not revise the Dust Control Plan.

[Rule 310 § 402]

M. Compliance Schedule:

The following referenced conditions shall become effective on the dates indicated:

1. Basic Dust Control Training Class:

No later than December 31, 2008, a site superintendent or other designated on-site representative of the Permittee, water truck drivers, and water pull drivers shall have successfully completed the Basic Dust Control Training Class, as described in Section V.J.1 of Attachment "D".

2. Dust Control Coordinator:

No later than June 30, 2008, any site and/or any contiguous site under common control of five acres or more of disturbed surface area subject to a permit shall, at all times during primary dust-generating operations related to the purposes for which the Dust Control permit was obtained, have on-site at least one individual designated by the Permittee as a Dust Control Coordinator, as described in Section V.K of Attachment "D".

[Rule 310 § 410]

N. Monitoring, Recordkeeping and Reporting:

The Permittee shall comply with the following requirements. Records shall be retained for five years and shall be made available to the Director upon request.

- 1. Any person who conducts dust-generating operations that require a Dust Control Plan shall keep a written record of self-inspection on each day dust-generating operations are conducted. Self-inspection records shall include daily inspections for crusted or damp soil, trackout conditions and clean-up measures, daily water usage, and dust suppressant application. Such written record shall also include the following information:
 - a. Method, frequency, and intensity of application or implementation of the control measures;
 - b. Method, frequency, and amount of water application to the site;
 - c. Street sweeping frequency;
 - d. Types of surface treatments applied to and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps;
 - e. Types and results of test methods conducted;
 - f. If contingency control measures are implemented, actual application or implementation of contingency control measures and why contingency control measures were implemented;
 - g. List of subcontractors' names and registration numbers updated when changes are made; and
 - h. Names of employee(s) who successfully completed dust control training class(es) required by Section V.J of this Attachment, date of the class(es) that such employee(s) successfully completed, and name of the agency/representative who conducted such class(es).
- 2. Any person who conducts dust-generating operations that do not require a Dust Control Plan shall compile and retain records (including records on any street sweeping, water applications, and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps) that provide evidence of control measure application, by indicating the type of treatment or control measure, extent of coverage, and date applied.
- 3. Upon verbal or written request by the Director, the log or the records and supporting documentation shall be provided as soon as possible but no later than 48 hours, excluding weekends. If the Director is at the site where requested records are kept, records shall be provided without delay.

[Rule 310 § 502]

O. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with Maricopa County Rule 310 §301, Maricopa County Rule 310 §303.1.a, Maricopa County Rule 310 §303.1.b, Maricopa County Rule 310 §303.2, Maricopa County Rule 310 §304, Maricopa County Rule 310 §305.1, Maricopa County Rule 310 §305.2, Maricopa County Rule 310 §305.3, Maricopa County Rule 310 §305.4, Maricopa County Rule 310 §305.5, Maricopa County Rule

310 §305.6, Maricopa County Rule 310 §305.7, Maricopa County Rule 310 §305.8, Maricopa County Rule 310 §305.11, Maricopa County Rule 310 §305.12, Maricopa County Rule 310 §306.1, Maricopa County Rule 310 §306.2, Maricopa County Rule 310 §307, Maricopa County Rule 310 §308, Maricopa County Rule 310 §309, Maricopa County Rule 310 §310, Maricopa County Rule 310 §402, Maricopa County Rule 310 §410, and Maricopa County Rule 310 §502.

[A.A.C. R18-2-325]



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ATTACHMENT "E": ADDITIONAL CONDITIONS FOR OPERATIONS INSIDE PIMA COUNTY

Air Quality Control Permit No. 45622 For

Fairfax Companies, LLC

I. APPLICABILITY

While operating in Pima County the Permittee shall comply with the Conditions set forth in Attachment "B" and Attachment "E". Whenever more than one Condition in this Attachment regulating the same emissions applies to any emissions unit, or whenever a Condition in this Attachment and a Condition in Attachment "B" regulating the same emissions applies to any emissions unit, the Condition or combination of Conditions resulting in the lowest emissions rate or lowest concentration of regulated air pollutants released to the atmosphere shall apply, unless otherwise specifically exempted or designated in the applicable permit Conditions.

II. FUGITIVE DUST REQUIREMENTS

A. Fugitive Dust Producing Activities

[P.C.C. §§ 17.16.060]

- 1. The Permittee shall control windblown dust, dust from haul roads, and dust emitted from land clearing, earthmoving, demolition, trenching, blasting, road construction, mining, racing event, and other activities, as applicable.
- 2. Until the area becomes permanently stabilized by paving, landscaping or otherwise, dust emissions shall be controlled by applying adequate amounts of water, chemical stabilizer, or other effective dust suppressant.
- 3. The Permittee shall not leave land in such a state that fugitive dust emissions (including windblown dust or dust caused by vehicular traffic on the area) would violate this permit. (Ord. 1994-83 § 50, 1994; Ord. 1993-128 § 4, 1993; Ord. 1979-93 (part), 1979)

B. Vacant Lots and Open Spaces

[P.C.C. §§ 17.16.080]

- 1. The Permittee shall minimize dust emissions from the construction, use, alteration, repair, demolition, clearing, leveling, or excavation of any vacant lot, parking area, housing plot, building site, sales lot, playground, livestock feedlot, or other open area, other than those solely used for soil-cultivation or vegetative crop-producing and harvesting agricultural purposes, by intermittently applying water or other effective dust suppressants to the area, paving, detouring, barring access, or other equivalently effective controls.
- 2. No vacant lot, housing plot, building site, parking area, sales lot, playground, livestock feedlot, or other open area other than those used solely for soil-cultivation or vegetative crop-producing and harvesting agricultural purposes shall be left in such a state after construction, alteration, clearing, leveling, or excavation that naturally induced wind blowing over the area causes visible emissions of airborne dust to diffuse beyond the property lines within which the emissions become airborne. Dust emissions must be permanently suppressed by landscaping, covering with gravel or vegetation, paving, or

applying equivalently effective controls.

3. This Section shall not apply when wind speeds exceed twenty-five miles per hour (as recorded by the National Weather Service or as estimated by an enforcement officer using the Beaufort Scale of Wind Speed Equivalents) unless control measures have not been taken or were not commensurate with the size or scope of the sources of dust.

[P.C.C. §§ 17.16.050]

C. Roads and Streets

[P.C.C. §§ 17.16.090]

- 1. Dust emissions from the construction phase of a new road must be minimized by applying the same measures specified in Condition II.A of Attachment "E".
- 2. No new unpaved private driveway shall be constructed unless the road will not be used by more vehicular traffic than that associated with a one or two-family private residence, and the road will not be adjacent to any recreational, institutional, educational, or retail sales facility.
- 3. No new unpaved service road or unpaved haul road shall be constructed unless dust will be suppressed after construction by intermittently watering, limiting access, or applying chemical dust suppressants to the road, in such a way that visible dust emissions caused by vehicular traffic on the road do not violate Section §§17.16.050 of the Pima County Code.
- 4. No new road other than a private driveway shall be constructed unless the paving specifications are those defined by, or equivalent to those of, the planning department and/or highway department of the jurisdictional agency.
- 5. The surfacing of roadways with asbestos tailings is prohibited.

D. Particulate Materials

[P.C.C. §§ 17.16.100]

- 1. Dust emissions from construction activity shall be effectively controlled by applying adequate amounts of water or other equivalently effective dust controls.
- 2. Dust emissions from the transportation of materials shall be effectively controlled by covering stock loads in open-bodied trucks, limiting vehicular speeds, or other equivalently effective controls.
- 3. Emissions from a sandblasting or other abrasive blasting operation shall be effectively controlled by applying water to suppress visible emissions (wet blasting), enclosing the operation, or use of other equivalently effective controls.

E. Permit Shield

Compliance with Condition IV shall be deemed compliance with P.C.C. §§ 17.16.060, P.C.C. §§ 17.16.080, P.C.C. §§ 17.16.090, and P.C.C. §§ 17.16.100.

[A.A.C. R18-2-325]

III. OTHER SPECIFIC REQUIREMENTS

A. Fuel Requirements

[P.C.C. §§ 17.16.010.C]

The Permittee of any portable or stationary equipment, which burns any material, except natural gas, shall keep complete records of the materials used as fuel.

B. Opacity Limitations

1. The Permittee shall not cause or permit the effluent from a single emission point, multiple emission point, or fugitive emissions source to have an average optical density equal to or greater than the opacity limiting standards specified in TABLE 4 at the end of this Condition, or as otherwise specified in this permit, subject to the following provisions:

[P.C.C. §§ 17.16.040]

- a. Opacities (optical densities), as measured in accordance with Method 9, of an effluent shall be measured by a certified visible emissions evaluator with his natural eyes, approximately following the procedures which were used during his certification, or by an approved and precisely calibrated in-stack monitoring instrument.
- b. A violation of an opacity standard shall be determined by measuring and recording a set of consecutive, instantaneous opacities, and calculating the arithmetic average of the measurements within the set unless otherwise noted herein. The measurements shall be made at approximately fifteen-second intervals for a period of at least six minutes, and the number of required measurements shall be as specified in TABLE 4. Sets need not be consecutive in time, and in no case shall two sets overlap. If the average opacity of the set of instantaneous measurements exceeds the maximum allowed by any rule, this shall constitute a violation.
- c. The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited.
- d. When the presence of uncombined water is the only reason for failure of a source to otherwise meet the requirements of this article, this article shall not apply.
- 2. Except for sources located within the boundaries of the Tohono O'Odham, Pasqua-Yaqui, and San Xavier Indian Reservations, opacity of an emission from any non-point source, as measured in accordance with the Arizona Testing manual, Reference Method 9, shall not exceed the following:

 [P.C.C. §§ 17.16.050.B]
 - a. 20 percent for such non-point sources in Eastern Pima County, east of the eastern boundary of the Tohono O'Odham Reservations.
 - b. 40 percent for such non-point sources in all other areas of Pima County.

TABLE 4: EMISSIONS-DISCHARGE OPACITY LIMITING STANDARDS

Type of Source	Instantaneous Opacity Measurements			Maximum Allowable Average Opacity, %
	Required No. (For a Set)	Excluded No. (Highest Values)	No. to Use For Averaging	
Cold Diesel Engines ¹	25	0	25	60
Loaded Diesel Engines ²	26	1	25	60
Other Sources ³	25	0	25	20

Applicable to the first 10 consecutive minutes after starting up a diesel engine.

(Ord. 1993-128 4, 1993; Ord. 1979-93 (part), 1979)

C. Visibility Limiting Standard

[P.C.C. §§ 17.16.050]

- 1. The Permittee shall not cause, suffer, allow or permit operations or activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne.
- 2. Opacity of an emission from any non-point source shall not be greater than 40 percent measured in accordance with the Arizona Testing Manual, Reference Method 9.
- 3. Open fires permitted according to Chapter 17.12 of the Pima County Regulations are exempt from the requirements of this Section.
- 4. The Permittee shall not cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken.
 - a. Sources required to obtain an air quality permit under ARS § 49-426, § 49-480 or Rule 17.12.470 of the Pima County Regulations may request to have the actions constituting reasonably necessary and feasible precautions approved and included as permit conditions.
 - b. Condition V.B. of Attachment "D" shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.

² Applicable to a diesel engine being accelerated under load.

³ Any source not otherwise specifically covered within this table.

5. Condition V.B of Attachment "D" shall not apply to the generation of airborne particulate matter from undisturbed land.

D. Permit Shield

Compliance with Condition IV shall be deemed compliance with P.C.C. \$\$ 17.16.010.C, P.C.C. \$\$ 17.16.040, and P.C.C. \$\$ 17.16.050.

[A.A.C. R18-2-325]

